

**WHAT IS CLAIMED IS:**

1. A Multiple chips image sensor module, comprising:

a first substrate, which has a upper surface and a lower surface, the upper surface formed with a plurality of first connected ends, the lower surface formed  
5 with a plurality of second connected ends ;

a photosensitive chip arranged at the upper surface of the substrate, and electrically connected the first connected ends by a plurality of wires ;

a lens holder formed with a penetrate hole at a central thereof, an internal thread being formed on the inner wall of the penetrate hole, the lens holder being  
10 mounted on the upper surface of the first substrate to encapsulate the photosensitive chip ;

a lens barrel arranged within the penetrate hole of the lens holder and is formed with an external thread, which is screwed to the internal thread of the lens holder, the lens barrel being formed with a chamber and an opening  
15 communicating the chamber ;

an aspheric and transparent layer placed within the chamber ;

a second substrate formed with a first surface on which a plurality of signal output ends are formed, and a second surface on which a plurality of signal input end are formed, the first surface of the second substrate mounted on the lower  
20 surface of the first surface, then the signal output end are electrically connected the second ends of the first surface ; and

a chip located on the second surface of the second substrate and is electrically connected to the signal input ends of the second substrate.

2. The multiple chips image sensor module according to claim 1, wherein second substrate is a flexible/hard combination board, which includes a flexible  
5 board and a hard board, the chip is mounted on the flexible board, the hard board is mounted on the lower surface of the first substrate.

3. The multiple chips image sensor module according to claim 1, wherein the chip is electrically connected to the signal input ends by wires.

4. The multiple chips image sensor module according to claim 1, wherein  
10 further includes a expose resin for encapsulating the chip.

5. The multiple chips image sensor module according to claim 1, wherein the chip is digit further includes a expose resin for encapsulating the chip.